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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/612,392

07/03/2003

Patrick Claus

CLAUS1

3191

7590

02/15/2005

BROWDY AND NEIMARK, P.L.L.C.  
624 Ninth Street, N.W.  
Washington, DC 20001

EXAMINER

BENSON, WALTER

ART UNIT

PAPER NUMBER

2858

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/612,392	CLAUS, PATRICK	
	Examiner	Art Unit	
	Walter Benson	2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on IDS filed 1/08/2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/08/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1-17 are presented for examination.

#### ***Claim Rejections - 35 USC § 112***

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. The term "preferably" in claim 2 is a relative term which renders the claim indefinite. The term "preferably" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. (i.e. narrow or broader ranges in the same claim)

#### ***Specification***

4. Claims 4-17 objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depended from any other multiple dependent claims. See MPEP § 608.01(n). Accordingly, the claims 4-17 not been further treated on the merits.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Nacken ( DE Patent Specification No. 267,462 and Nacken hereinafter).

7. As to claim 1, Nacken discloses an apparatus for distinguishing gemstones comprising:  
at least a part of a gemstone that is to be qualified is placed in the electrical field of a capacitor (col. 1 line 43 and col. 2 line 1);

whereby the electrical capacity of this capacitor is measured and compared to a reference capacity of this capacitor when a reference material (col. 1, lines 9-12) is placed in the electrical field (col. 1, lines 38-40);

whereby the gemstone is qualified as a gemstone with electrical conductivity when the measured capacity of the capacitor, which comprises the part of the gemstone, is larger than the reference capacity (col. 2, lines 46-51).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nacken in view of MacLean et al. (US Patent No. 3,864,626 and MacLean hereinafter).

Although system disclosed by Nacken shows substantial features of the claimed invention (discussed in the paragraph above), it fails to disclose:

before the reference capacity is measured, a reference material is used with a dielectric constant which is larger than that of the gemstone (i.e carbon fiber) to be qualified, which is preferably at least equal to that of reference material [claim 2];

before said reference capacity is measured, a reference material is used with a relative dielectric constant which is larger than 9.7 [claim 3].

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Nacken, as evidenced by MacLean.

MacLean discloses a method and apparatus for nondestructively evaluating physical properties of materials having:

before the reference capacity is measured, a reference material is used with a dielectric

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constant which is larger than that of the gemstone (i.e., carbon fiber) to be qualified, which is preferably at least equal to that of reference material [claim 2] (col. 5, lines 10-23) to provide for quality control;

before said reference capacity is measured, a reference material is used with a relative dielectric constant which is larger than 9.7 [claim 3] (col. 4, lines 62-67).

Given the teaching of MacLean, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying Nacken by employing the well known or conventional features of capacitive sensors, such as disclosed by Maclean in order to efficiently determine the relative capacitance of the electrically conductive material and for the purposes discussed above.

#### **Prior Art Made of Record**

**10.** The prior art made of record and not relied upon is considered pertinent to applicants disclosure

A. Clauss et al. (US 2004/0239305 A1) discloses a method for locating objects enclosed in a medium.


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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter Benson whose telephone number is (571) 272-2227. The examiner can normally be reached on Mon to Fri 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Walter Benson  
Patent Examiner

February 9, 2005